ROTATING UPPERWORKS WEIGHT AND CENTER OF GRAVITY (WU)			
EQUIPPED AS	WEIGHT (lbs)	DIM "A" (in.)	DIM "B" (in.)
999 SERIES 1 (114,600 lb. CTWT)	172,391	133.3	-16.6
999 SERIES 1 (149,600 lb. CTWT)	207, 391	141.1	-10.8
999 SERIES 2 (184,600 lb. CTWT)	242,391	146.6	-3.4
999 SERIES 3 (219,600 lb. CTWT)	277,391	150.7	4.9
LOWERWORKS WEIGHT AND CENTER OF GRAVITY (WL)			
EQUIPPED AS	WEIGHT (lbs)	DIM "C" (in.)	DIM "D" (in.)
999 SERIES 1	106.713	0	73.9

EQUIPPED AS	WEIGHT (lbs)	DIM "C" (in.)	DIM "D" (in.)
999 SERIES 1	106.713	0	73.9
999 SERIES 1 - WITH OPTIONAL CARBODY JACKS	109,599	0	73.7
999 SERIES 2	150,713	0	7 <b>4</b> .6
999 SERIES 2 - WITH OPTIONAL CARBODY JACKS	153,599	0	7 <del>4</del> .5
999 SERIES 3	186,713	0	71.8
999 SERIES 3 - WITH OPTIONAL CARBODY JACKS	189,599	0	71.7
	999 SERIES 1 999 SERIES 1 - WITH OPTIONAL CARBODY JACKS 999 SERIES 2 999 SERIES 2 - WITH OPTIONAL CARBODY JACKS 999 SERIES 3 999 SERIES 3 - WITH	999 SERIES 1 106.713 999 SERIES 1 - WITH 109.599 0PTIONAL CARBODY JACKS 999 SERIES 2 150.713 999 SERIES 2 - WITH 153.599 0PTIONAL CARBODY JACKS 999 SERIES 3 186.713 999 SERIES 3 - WITH 189.599	999 SERIES 1 106.713 0 999 SERIES 1 - WITH 109.599 0 999 SERIES 2 150.713 0 999 SERIES 2 150.713 0 999 SERIES 2 WITH 153.599 0 999 SERIES 3 186.713 0 999 SERIES 3 - WITH 189.599 0

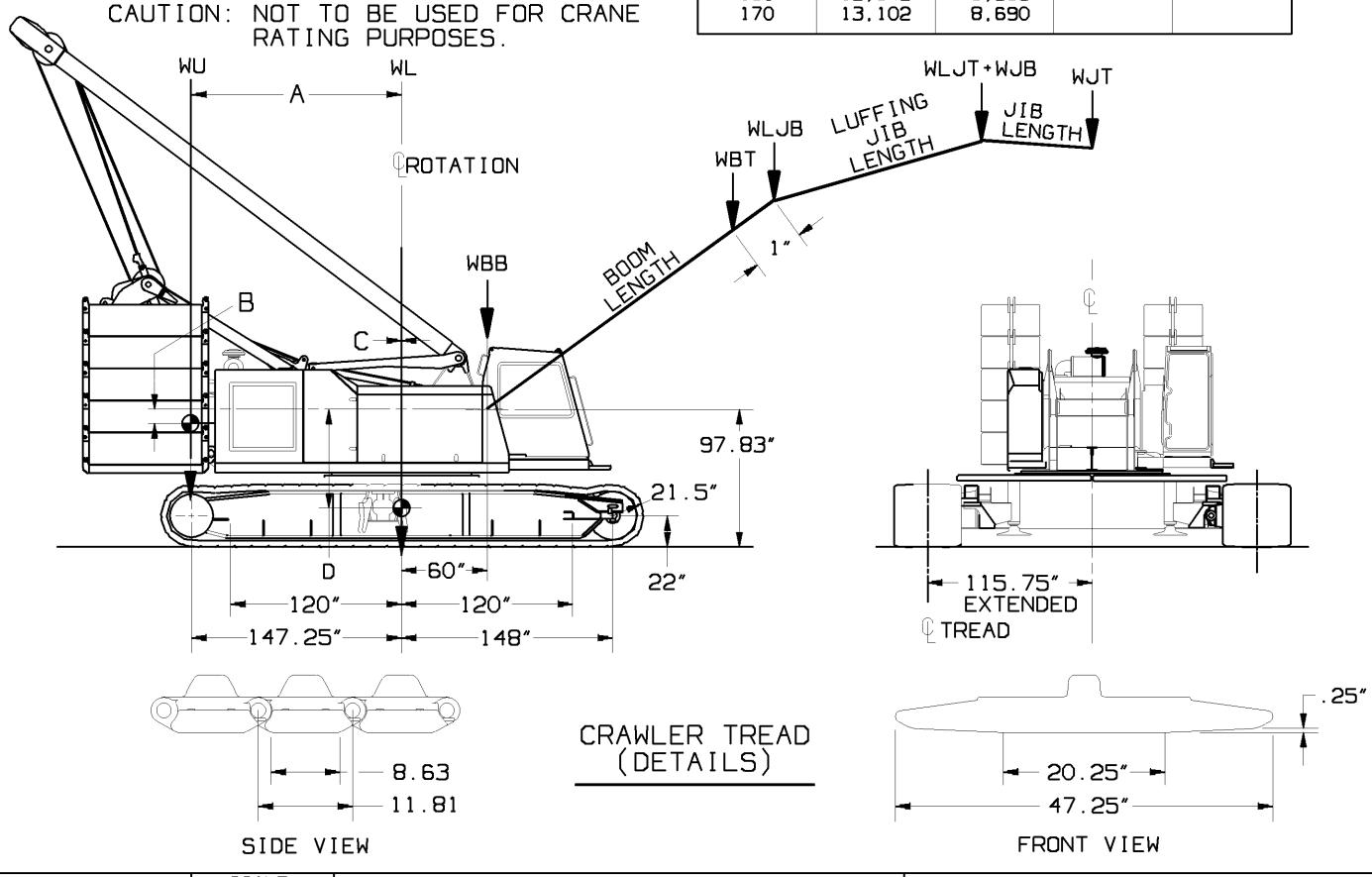
NOTE 1: BOOM AND JIB WEIGHTS INCLUDE WEIGHT OF MAST, BOOM, JIB, PENDANTS ETC.: BUT DO NOT INCLUDE WEIGHT OF LOAD, LOAD BLOCK, WEIGHT BALL, SLINGS, ETC. ALL ITEMS SUSPENDED FROM BOOM OR JIB MUST BE CONSIDERED PART OF THE LOAD.

NOTE 2: WEIGHTS FOR 70 THRU 180 FT. BOOMS INCLUDE A 8 SHEAVE BOOM POINT, 190 FT BOOM INCLUDES A 2 SHEAVE BOOM POINT, AND 200 FT. BOOM REQUIRE THAT ALL BOOM POINT SHEAVES BE REMOVED.

NOTE 3: CONSULT PROPER CRANE CAPACITY CHART FOR LIFTING CAPACITIES AND ALLOWABLE BOOM AND JIB COMBINATIONS.

BOOM WEIGHTS			
	#82 or	#22EL	
BOOM LENGTH (ft.)	WBB (lbs)	WBT (Ibs)	
70 80 90 100 110 120 130 140 150 160 170 180 190 200	21.534 23.526 25.400 26.001 27.822 28.307 29.668 30.075 31.914 32.190 33.439 33.673 35.560 35.732	20,860 21,775 22,808 22,644 23,731 23,917 24,487 24,620 25,689 26,084 26,736 27,173 28,194 28,693	

JIB WEIGHTS				
поом	LUFFER #135		FIXED #138	
BOOM LENGTH (ft.)	WLJB (Ibs)	WLJT (Ibs)	WJB (Ibs)	WJT (lbs)
30 40 50 60 70 80 90 100 110 120 130 140 150 160 170	9.636 10.159 10.460 10.931 10.976 11.462 11.731 12.261 12.298 12.842 13.102	5.535 5.944 6.223 6,639 6,724 7.124 7.435 7.837 7.982 8,369 8,690	1.134 1.274 1.411 1.545	820 934 1,052 1,173



DATE	SCALE		C G CHART
4-26-02	dr. JLD	MANITOWOC CRANES, INC.  MANITOWOC, WISCONSIN	48" TREADS
	ck. JLD	MODEL 999	BOOM NO.82 OR 22EL
T.S. 335	APP.		LUFFING JIB NO.135